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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,499	02/09/2004	Scott Wu	14235 B	2314
7590 03/16/2007 Alan D. Kamrath NIKOLAI & MERSEREAU, P.A. Suite 820, International Centre 900 Second Avenue South Minneapolis, MN 55402			EXAMINER BERTHEAUD, PETER JOHN	
			ART UNIT 3746	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/16/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/775,499	WU, SCOTT	
	<b>Examiner</b>	<b>Art Unit</b>	
	Peter J. Bertheaud	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-14,19, and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-14,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/22/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is in response to the amendments of 1/22/2007. It is noted that claims 1, 9-11, 14, and 20 have been amended and claims 2-4 and 15-18 have been canceled. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains: Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5-14, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu 6,485,264 in view of Wang 6,428,290, and in further view of Wang 6,676,390.

Wu discloses an air pump assembly including a base comprising a socket (11), a cylinder (10) inserted in the socket and a first joint formed thereon (area directly above pedals, formed into socket and cylinder), the first joint comprising a transverse channel (13 in Fig. 3) and an axial channel (10a) in communication with the transverse channel; a pumping set comprising a cylinder (10) for receiving the first joint and a piston (22) put in the cylinder; a gauge set comprising a gauge (60), a housing for receiving the gauge

Art Unit: 3746

(70) and a tube (50) extending from the housing and defining two apertures in communication with the transverse channel of the first joint; a second joint (46) inserted in the apertures of the cylinder (42), and the transverse channel of the first joint, the second joint comprising an axial channel (44), a first transverse channel (45) for communicating the axial channel thereof with the axial channel of the first joint and a second transverse channel (vertical portion of 44 inside 48) for communicating the axial channel thereof with the tube; and a nozzle set (91) connected to the second joint (46), with the tube located intermediate the socket and the nozzle set, with the nozzle set including a nozzle in communication with the second joint (46). Wu also discloses that both the cylinder and the socket define two apertures for receiving the second joint (see col. 3, lines 11-13 and 13 in Fig. 3). Wu further discloses that the gauge set comprises a collar (72) formed on the tube, and the cylinder is inserted in the socket through the collar. Wu discloses that the pumping set comprises a rod (20), a handle (21) attached to the rod, and that the base comprises at least one pedal (see 11 in Fig. 2) extending from the socket. Wu discloses that the nozzle (91) receives a valve of an article to be pumped, and wherein the nozzle set further includes a pipe (90) for communicating the nozzle with the second joint (46), as well as the first joint being integrated with the base. Wu further discloses that the second joint includes a head (43) for abutment against the cylinder, with the cylinder (10) and the tube (50) sandwiched between the nozzle set (90, 91) and the head 43. However, Wu does not show a first joint put in the cylinder or that the cylinder defines two apertures in communication with the transverse channel of

Art Unit: 3746

the first joint. Furthermore, Wu fails to disclose that the first joint is made independent of the base.

Wang teaches an air pump including a base (100), a pumping set comprising a cylinder (110) and a piston (180) put in the cylinder; a first joint (130) put in the cylinder, the first joint comprising a transverse channel (112) and an axial channel (132) in communication with the transverse channel; a second joint (120) inserted in the cylinder and through the first joint, the second joint comprising an axial channel (121), a first transverse channel (123) for communicating the axial channel thereof with the axial channel of the first joint and a second transverse channel (126) for communicating the axial channel thereof with a tube. Wang further teaches that the cylinder defines two apertures (112) in communication with the transverse channel of the first joint (see the positioning of 130 in Fig. 1) and that that the first joint (130) is made independent of the base (100). Wang teaches that these aspects of the invention would be advantageous because the convenience of the user can be greatly increased by the modifications.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the air pump assembly of Wu by placing a first and second joint inside the cylinder as independent parts, as taught by Wang, in order to make the pump more user friendly (see col. 1, lines 9-34).

Wu in view of Wang 290 discloses the invention as discussed above. However, Wu in view of Wang 290 does not teach the following claimed limitations taught by Wang 390.

Wang 390 teaches a manual air pump including a base, a cylinder (30), a piston within that cylinder (53), and a joint protruding from the lower end of the pump that contains an axial (101) and transverse passageway. Wang 390 further discloses that a tube (the combination of 60 and 100 in Figs. 1, 2, and 4) defines two apertures for receiving this joint. Wang 390 also teaches a cap (see the narrow splined cylinder that abuts channel 101 on right side) connected to the second joint, with the tube located intermediate the socket and the cap, with the cap being in communication with a transverse channel. Wang 390 teaches that this would be advantageous because it provides communication between the outlet (11) and the discharge tube (60).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the air pump assembly of Wu in view of Wang 290 by having the tube define two apertures for receiving the second joint as well as a cap through which the nozzle would communicate with the second joint, as taught by Wang 390, in order to provide communication between the outlet and the discharge tube (see col. 2, lines 35-37).

### ***Response to Arguments***

4. Applicant's arguments filed 1/22/2007 have been fully considered but they are not persuasive.

5. The Applicant argues that none of the prior art shows a second joint extending through apertures formed in the socket, cylinder, and tube and through the first joint and connected to a nozzle set. However, Wu 6,485,264 in view of Wang 6,428,290, and in further view of Wang 6,676,390 teaches these claimed limitations in combination. Wu

Art Unit: 3746

discloses a second joint that extends through apertures in a socket and cylinder, Wang 290 discloses a second joint that extends through a first joint and a cylinder, and Wang 390 discloses a second joint that extends through the a and a tube. Therefore, Wu 6,485,264 in view of Wang 6,428,290, and in further view of Wang 6,676,390 discloses the invention as claimed.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Art Unit: 3746

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Bertheaud whose telephone number is (571) 272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
PJB 3/12/07

  
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